

1/1 WPAT - ©Derwent

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 TI - Bleach bath contg. nitrilo di:acetic mono:propionic acid as chelant - for ferric iron at specified pH, used for bleaching colour photographic silver halide materials  
 DC - E16 E31 G06 P83  
 PA - (GEVA ) AGFA-GEVAERT AG  
 IN - MECKL H; TAPPE G; WICHMANN R  
 NP - 6  
 NC - 7  
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Bleach bath contains a Fe-III complex, in which at least 20 mole-% chelating agent (I) is nitrilodiacetic-monopropionic acid of formula (HOOC-CH<sub>2</sub>)<sub>2</sub>-N-CH<sub>2</sub>-CH<sub>2</sub>-COOH and is adjusted to a pH between 6.0 and 4.5.

At least 80 mol. % of (I) is pref. (IA). The bath pref. contains 1-120 mol. % excess (I). It may contain thiosulphate in an amt. insufficient to fix the undeveloped Ag halide or be free from thiosulphate. USE/ADVANTAGE - The bath environmentally friendly and readily biodegradable. it is used for bleaching all colour photographic Ag halide materials, e.g. colour negative and reversal films and paper.

In an example, selectively exposed colour reversal paper was processed by 45 s development at 35 deg.C 22 s washing at under 20 deg.C, 90 s bleaching at 35 deg.C 45, s washing at 30 deg.C, 45 s fixing at 35 deg. C 90 s washing at 30 deg. C and drying. The aq. bleach bath contained, (A,B) 40g/l Fe(NO<sub>3</sub>)<sub>3</sub>.9H<sub>2</sub>O, 25g/l NH<sub>4</sub>Br and 25% NH<sub>3</sub> soln. to (A) pH 5.0 (B) pH 6 or (c) 50 g/l NH<sub>4</sub>-Fe-III EDTA, 5g/l EDTA 80 g/l NH<sub>4</sub>Br and NH<sub>3</sub> soln. or acetic acid to pH 6.0 baths (B, C) being controls. The development and fixing baths were the same in all cases. Samples bleached in (A,C) were free from residual Ag, whereas those bleached in (B) still contained Ag. (Dwg.0/0)

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